

REMARKS

Claims 1, 2, 4, 5, 8, 10, 12-14, 18-22, 31 and 36 are pending. No new matter is added in this Response.

1. Claims 1, 2, 4, 8, 10, 12-14, 18-22, 31 and 36

The Office Action rejected claims 1, 2, 4, 8, 10, 12-14, 18-22, 31 and 36 under 35 U.S.C. § 103(a) over *Isamu* in view of *White*. However, in order to render a claim obvious, the cited references must suggest each and every limitation of the claim. *See* MPEP § 2143. The combination of *Isamu* in view of *White* fails to teach all elements of those claims, and thus the combination fails to render any of the claims obvious.

Claims 1, 2, 4, 8, 10, 12-14, and 18-22 are directed to a method that includes “setting the angle between the grinding wheel rotational axis and roll rotational axis less than about 25 degrees.” Each of these claims also requires “maintaining a ratio of axial taper tolerance (TT) to radial wheel wear compensation (WWC) of greater than 10” and “grinding the roll surface to a surface roughness R_a of less than 5 micrometer while leaving the roll surface substantially free of feed marks, chatter marks, and surface irregularities.”

The Office states that *Isamu* discloses a method of grinding a ferrous wheel roll...the method comprises the claimed method steps that include: mounting the wheel on a rotational spindle and grinding the roll surface and maintaining one or both of the grinding wheel rotational speed and the mill roll rotational speed it varied at an amount of +/- to 40% in

amplitude, with a period of 1 to 30 seconds, and the wheel rotational frequency is varied at an amplitude of +/- 20% with a period of less than 5 seconds.

The Office Action fails to state where in *Isamu* these limitations are taught, and the reference, in fact, contains no such teaching.

The Office further states that, “*White* discloses a grinding apparatus in which the TT to WWC is greater than 25 °(emphasis added).”

With regard to claim 1, Applicants claim (in part), “...maintaining a ratio of axial taper tolerance (TT) to radial wheel wear compensation (WWC) of greater than 10.”

The Office Action fails to state where in *White* these limitations are taught, and the reference, in fact, contains no such teaching.

To find a claim obvious, the Patent Office must make “a searching comparison of the claimed invention – including all its limitations – with the teachings of the prior art.” *In re Ochai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added); see also *In re Wada and Murphy*, Appeal No. 2007.3733 (BPAI Jan. 18, 2008) (obviousness rejection reversed when the Examiner did not explain where or why the cited references disclosed a particular claim limitation). **Here, the Office Action does not explain where any of the references teach the limitations above, and the references contain no such teachings.** Applicants respectfully request withdrawal of the rejections of claims 1, 2, 4, 8, 10, 12-14, and 18-22.

Claims 31 and 36 are directed to a method that includes grinding “wherein a ratio of TT to WWC is greater than 25.” The Office Action fails to state where in *Isamu* and *White* these limitations are taught as required by MPEP § 2143 and *In re Ochai*, and the references in

fact contain no such teaching. Applicants respectfully request withdrawal of the rejections of claims 31 and 36.

2. Claim 5

The Office Action contains no comment on claim 5. Applicants request allowance of claim 5.

CONCLUSION

Based on the arguments presented above, Applicants request withdrawal of the rejections and allowance of all claims. If the Examiner has any questions or comments or needs any additional information, I invite the Examiner to telephone me at the number listed below.

Respectfully submitted,

/Maria C. Gasaway/

Maria C. Gasaway
Registration No. 51,721

Diamond Innovations, Inc.
6325 Huntley Road
Worthington, OH 43085
Tel. 614.438.2834
Fax. 614.438.2235